

Superfund Records Center
SITE: Wells G+H
BREAK: 135
OTHER: 549210

Wells G & H Site Background

Site Description

The Wells G & H Superfund Site covers approximately 330 acres in east Woburn, Middlesex County, Massachusetts. The boundaries of the Site are Route 128 to the north, Route 93 to the east, the Boston and Maine railroad to the west, and Salem Street to the South.

The Aberjona River flows through the Site and eventually reaches the Mystic Lakes in Winchester as part of the Mystic River watershed. Former municipal water supply Wells G and H drew from the Aberjona River basin. The Site includes substantial wetland areas on both sides of the Aberjona River which are associated with the Aberjona River floodplain.

The area surrounding the wells within the Site boundary is a mixed use area consisting of light industry, commercial businesses, industrial parks, residences, and recreational property. Outside the Site boundaries, the area is dominated by industrial and commercial property to the north and residential property to the south.

Wells G and H were developed by the City of Woburn in 1964 and 1967 respectively. The wells were capable of supplying two million gallons of water per day and were initially intended to supplement previously existing supplies. Local officials estimate that the wells provided an estimated thirty percent of the community's water supply.

Discovery of Contamination

In 1979, testing of municipal water supply wells G and H by the Massachusetts Department of Environmental Protection (formerly Massachusetts Department of Environmental Quality Engineering) detected contamination by several chlorinated volatile organic compounds, including 1,1,1-trichloroethane, trans -1, 2-dichloroethane, tetrachloroethene, trichloroethane, and chloroform at concentrations ranging from one to four hundred parts per billion (ppb). As a result of these findings, the wells were immediately shut down. Woburn then revived an existing agreement with the Metropolitan District Commission (now the Massachusetts Water Resources Authority or MWRA) to compensate for the lost water supply. The wells have not been in use since May 21, 1979.

-more-

In 1981, U.S. EPA completed a hydrogeologic investigation and groundwater quality evaluation of the area surrounding Wells G and H to determine the extent and degree of contamination and to identify the sources of contamination. EPA identified the source areas for contamination at Wells G and H to be within a one square mile area surrounding the wells. The following five properties were identified as sources of contamination: the W.R. Grace Co.-Conn. property, the UniFirst property, the New England Plastics property, the Wildwood property (also referred to as the Beatrice property), and the Olympia Nominee Trust property.

On September 8, 1983, Wells G and H were listed as a Superfund Site on the National Priorities List (NPL) of hazardous waste sites eligible for federal funding for investigation and cleanup.

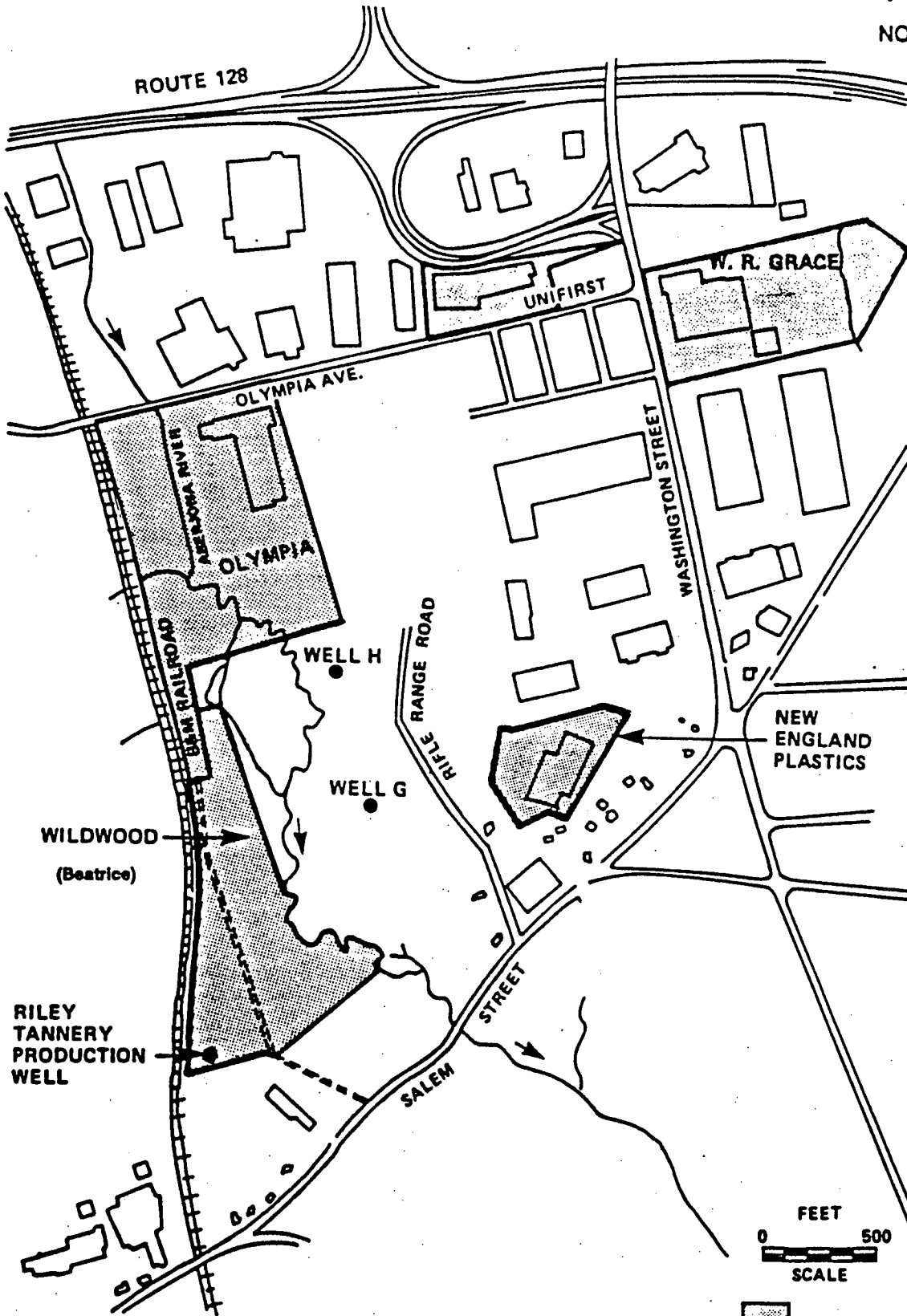
EPA Studies To Date

In response to the threats posed by the Site, EPA and various property owners have conducted numerous studies to determine the nature and extent of contamination at the Site. In 1986, EPA completed an initial Remedial Investigation (RI) for the Site, which focused primarily on groundwater contamination and included installation of groundwater monitoring wells, the collection of samples from the groundwater and surface waters of the Aberjona River, and oversight of other work done by other parties at Wells G & H. In 1988, EPA completed a Supplemental Remedial Investigation, which involved gathering additional soil and groundwater information as well as an Endangerment Assessment to define the current and future risks to human health and the environment posed by site contamination.

Volatile organic compounds (VOCs) are the primary contaminant in the soil and the groundwater at Wells G & H. Other contaminants include polychlorinated biphenyls (PCB's), chlordane (a pesticide), and polyaromatic hydrocarbons (PAHs).

In 1989, EPA completed the Feasibility Study for the site, which examined the various technical options for site cleanup. After review of public comment on its Proposed Plan for cleanup, EPA issued its Record of Decision detailing the cleanup to be performed at the site, signed September 14, 1989.

WELLS G AND H SITE MAP SOURCE AREAS



FEET
0 500
SCALE

 PROPERTY BOUNDARY
(APPROXIMATE)

The Cleanup Plan

In September of 1989, EPA issued a Record of Decision that described how the sources of contamination at the site would be cleaned up. This plan to address contamination in soil and ground water was modified as part of the negotiations for the Consent Decree entered today with the Court. The revised plan is summarized below.

Soil Treatment

The parties to today's agreement will use a combination of in-situ volatilization and off-site incineration to treat contaminated soil on each of their properties. In-situ volatilization is an innovative technology that is effective for removing volatile organic contaminants (VOCs) which are the principle contaminants in the soil at the Wells G & H site. The in-situ (in-place) volatilization process uses vacuum pumps to draw contaminated air from the soil through wells installed around the site. The air passes through a chamber where contaminants are filtered out, and the treated air is released. Using this technology soil does not have to be excavated for treatment, thus minimizing damage to environmentally sensitive areas and reducing the potential for exposure to site contaminants during treatment.

Some areas of the site are contaminated with PCBs, PAHs and pesticides that cannot be treated effectively with in-situ volatilization. These soils will be excavated and treated in an off-site licensed hazardous waste incinerator. The decision to use off-site incineration is a change from the original September 1989 cleanup plan, which called for on-site incineration. Although off-site incineration is more expensive than on-site incineration, the settling parties requested this change to minimize difficulties in coordinating use of an on-site incinerator among the parties.

Groundwater Treatment

Groundwater will be pumped from each of the properties considered to be a source of site contamination. Contaminants will be removed in separate treatment plants designed to address the particular mix of contamination present at each site. In a change from the initial cleanup decision, today's Consent Decree allows UniFirst and W.R. Grace to share groundwater extraction systems if the joint system can be shown capable of meeting EPA cleanup goals for the site.

**History of Legal Enforcement Action
Under Superfund at the Wells G and H Site**

Under the Superfund law, EPA is authorized to pursue parties identified as potentially responsible for site contamination for the cost of site investigation and cleanup. Actions taken against Potentially Responsible Parties (PRPs) identified at the site to date are listed below.

- In 1983, EPA issued three Administrative Orders pursuant to Section 3013 of the Resource Conservation and Recovery Act (RCRA) to W.R. Grace & Company (W.R. Grace), Beatrice Foods, Inc. (Beatrice) and the UniFirst Corporation (UniFirst), ordering them to conduct studies of contamination on their respective properties. EPA also issued a series of Orders pursuant to Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly referred to as the Superfund law.
- In 1985, EPA ordered Wildwood Conservation Corporation to construct a fence and provide a security guard to limit contact with soil contamination at the property.
- In 1987, EPA ordered UniFirst to install monitoring wells to evaluate the extent of and to remove all pure tetrachlorethene contamination found under its property. Olympia Nominee Trust (Olympia), under two separate Orders, issued in 1986 and 1987, was required to remove drums and debris from the western half of its property.
- On April 20, 1990, EPA issued special notice pursuant to Section 122(e) of CERCLA to PRPs offering the opportunity to perform the cleanup outlined in the 1989 Record of Decision for the site, as well as the investigation required for future action on remaining contamination problems.
- On June 19, 1990, a group of PRPs submitted jointly a proposal in response to special notice.
- On September 28, 1990, following extensive negotiations, the United States, the Commonwealth of Massachusetts and 12 settling PRPs reached agreement on a proposed Consent Decree and Scope of Work for future action at the site. This agreement was lodged with the court today.

- Ingersoll-Rand company who owns contaminated property within the site at 39 Olympia Avenue; and
- The City of Woburn who owns contaminated property within the site upon which Wells G and H are located.